

IN THE CLAIMS

Please cancel Claims 1-28 without prejudice or disclaimer.

Please add new Claims 29-54.

1-28 (canceled)

1 29. (new) A method providing network attached storage (NAS) services comprising:

2 configuring a distributed processing system by coupling a multiplicity of
3 distributed devices using a network, wherein each of the distributed devices is enabled by
4 a client agent program to process workloads for the distributed processing system;

5 configuring the client agent program to have a software-based NAS component to
6 assess unused or under-utilized storage resources in selected distributed devices from the
7 multiplicity distributed devices;

8 generating a representation by the software-based NAS component that the
9 selected distributed devices are each NAS devices having an available amount of storage
10 resources selected from the unused and under-utilized storage resources; and

11 processing data storage and access workloads for the distributed processing
12 system by accessing data from or storing data into portions of the available amounts of
13 storage resources of the selected distributed devices to provide the NAS services to client
14 devices coupled to the network.

1 30. (new) The method of claim 29, wherein the client agent program enables at least one
2 of the selected distributed devices to operate as a stand-alone dedicated NAS device.

1 31. (new) The method of claim 29, wherein the client agent program enables at least one
2 of the selected distributed devices to function as a location distributed device to store
3 location information for data stored by the selected distributed devices.

- 1 32. (new) The method of claim 31, further comprising enabling the location distributed
2 device to receive data storage and access requests from the client devices coupled to the
3 network and to direct the client devices to the selected distributed devices storing the
4 requested data.
- 1 33. (new) The method of claim 32, further comprising managing the NAS services at
2 least in part utilizing at least one centralized server system.
- 1 34. (new) The method of claim 33, wherein the centralized server system downloads the
2 NAS component to the client agent programs in the distributed devices.
- 1 35. (new) The method of claim 33, wherein the centralized server system stores location
2 information for data stored in the selected distributed devices and at least in part directs
3 the client devices to the distributed devices storing the requested data.
- 1 36. (new) The method of claim 35, further comprising utilizing the centralized server
2 system to receive data storage and access requests from the client devices and to route
3 data storage and access workloads to the selected distributed devices based in part upon
4 individual capabilities of the selected distributed devices, wherein the individual
5 capabilities are stored in a capabilities database coupled to the centralized server system.
- 1 37. (new) The method of claim 29, wherein the network is the Internet.
- 1 38. (new) The method of claim 29, further comprising managing storage resources for
2 the selected distributed devices using a storage priority control that facilitates full use of
3 the available amounts of storage resources.
- 1 39. (new) The method of claim 38, wherein the storage priority control comprises a
2 parameter selectable through one of the client devices.
- 1 40. (new) The method of claim 39, wherein the storage priority control comprises
2 storage priority level schemes that prioritize data storage and deletion.

1 41. (new) The method of claim 39, wherein the storage priority control comprises a
2 priority marking directly given to data or files.

1 42. (new) A system for providing network attached storage (NAS) services comprising:

2 a distributed processing system configured by coupling a multiplicity of
3 distributed devices using a network, wherein each of the multiplicity distributed devices
4 are enabled by a client agent program to process workloads for the distributed processing
5 system; and

6 a software-based NAS component operating within each of the client agent
7 programs, wherein the software-based NAS component assesses unused storage resources
8 of the multiplicity distributed devices, allocates an available amount of unused storage
9 resources in selected distributed devices from the multiplicity distributed devices,
10 generates a representation that the selected distributed devices are each NAS devices
11 having the available amount of storage resources, and processes data storage and access
12 workloads in the selected distributed devices for the distributed processing system by
13 accessing data from and storing data into portions of each of the available amounts of
14 unused storage resources in the selected distributed devices to provide the NAS services
15 to client devices coupled to the network.

1 43. (new) The system of claim 42, wherein the client agent program enables at least one
2 of the selected distributed devices to operate as a stand-alone dedicated NAS devices.

1 44. (new) The system of claim 42, wherein the client agent program enables at least one
2 of the selected distributed devices to function as a location distributed device to store
3 location information for data stored by the selected distributed devices.

1 45. (new) The system of claim 44, further comprising enabling the location distributed
2 device to receive data storage and access requests from the client devices coupled to the
3 network and to direct the client devices to the selected distributed devices storing the
4 requested data.

- 1 46. (new) The system of claim 45, further comprising managing the NAS services at
2 least in part utilizing at least one centralized server system.
- 1 47. (new) The system of claim 46, wherein the centralized server system downloads the
2 NAS component to the client agent programs in the distributed devices.
- 1 48. (new) The system of claim 46, wherein the centralized server system stores location
2 information for data stored in the selected distributed devices and at least in part directs
3 the client devices to the distributed devices storing the requested data.
- 1 49. (new) The system of claim 48, further comprising utilizing the centralized server
2 system to receive data storage and access requests from the client devices and to route
3 data storage and access workloads to the selected distributed devices based in part upon
4 individual capabilities of the selected distributed devices, wherein the individual
5 capabilities are stored in a capabilities database coupled to the centralized server system.
- 1 50. (new) The system of claim 42, wherein the network is the Internet.
- 1 51. (new) The system of claim 42, further comprising managing storage resources for
2 the selected distributed devices using a storage priority control that facilitates full use of
3 the available amounts of storage resources.
- 1 52. (new) The system of claim 51, wherein the storage priority control comprises a
2 parameter selectable through one of the client devices.
- 1 53. (new) The system of claim 52, wherein the storage priority control comprises
2 storage priority level schemes that prioritize data storage and deletion.
- 1 54. (new) The system of claim 52, wherein the storage priority control comprises a
2 priority marking directly given to data or files.